

AMENDMENTS TO THE CLAIMS

Claims 26-33 are currently pending.

Claim 33 is being canceled. Claim 26 is being amended. New claims 34-39 are being added.

After the amendments, claims 26-32 and 34-39 will be pending.

Listing of Claims:

1-25 (Canceled)

26. (Currently amended) A method of transplanting into a mammal preparing a cellular composition with a reduced amount of neoplastic cells ~~by selectively removing neoplastic cells from a mixed cellular composition located outside of a living organism~~, said method comprising the steps of:

- (a) providing a mixed cellular composition which comprises neoplastic cells and contacting the mixed cellular composition with a virus, wherein the virus is capable of selectively killing the neoplastic cells, under conditions which result in substantial killing of the neoplastic cells so as to selectively remove neoplastic cells from the composition, wherein the neoplastic cells are selected from the group consisting of ras-activated neoplastic cells, p53-deficient neoplastic cells, Rb-deficient neoplastic cells, and neoplastic cells that are not growth-inhibited by interferon, and the virus is selected from the group consisting of reoviruses, vaccinia viruses having a mutation in the K3L or E3L genes, herpes simplex viruses having a mutation in the  $\gamma$ 134.5 gene, parapoxviruses having a mutation in the OV20.0L gene, and adenoviruses having a mutation in the E1A or E1B gene; and
- (b) ~~removing the virus from the treated composition; and~~
- (c) ~~collecting transplanting the resulting composition into the mammal.~~

27. (Previously presented) The method of claim 26 wherein the mixed cellular composition comprises hematopoietic stem cells.
28. (Previously presented) The method of claim 27 wherein the hematopoietic stem cells have been harvested from bone marrow.
29. (Previously presented) The method of claim 27 wherein the hematopoietic stem cells have been harvested from blood.
30. (Previously presented) The method of claim 26 wherein the mixed cellular composition comprises a tissue, an organ or any portion of a tissue or an organ.
31. (Previously presented) The method of claim 30 wherein the tissue or organ is selected from the group consisting of liver, heart, kidney, cornea, skin, lung, pancreatic islet cells, and whole blood.
32. (Previously presented) The method of claim 26 wherein the mixed cellular composition comprises cultured cells, semen and eggs.
33. (Canceled)
34. (New) The method of claim 26 further comprising removing the virus from the virus treated cellular composition before transplantation.
35. (New) The method of claim 26 wherein the virus-treated composition is stored in a solution containing DMSO before transplantation.
36. (New) The method of claim 26 wherein the mammal is a human.
37. (New) The method of claim 26 wherein the mammal suffers from cancer.

38. (New) The method of claim 26 wherein the transplantation is an autologous transplantation.

39. (New) The method of claim 26 wherein the transplantation is an allogeneic transplantation.